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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of:

Communications Assistance for
Law Enforcement Act

CC Docket No. 97-213

**REPLY COMMENTS OF THE
TELECOMMUNICATIONS INDUSTRY ASSOCIATION**

Stewart A. Baker
Thomas M. Barba
L. Benjamin Ederington
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-3000

Grant Seiffert
Vice President, Government Relations
Matthew J. Flanigan
President
Telecommunications Industry Association
1300 Pennsylvania Avenue, N.W.
Suite 350
Washington, DC 20004
(202) 383-1483

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SUMMARY

The most recent round of comments in this proceeding reinforces the already extensive record before the Commission. This record clearly demonstrates that J-STD-025 -- the industry CALEA standard for wireline, cellular and broadband Personal Communication Services ("PCS") technologies -- is not deficient. To the contrary, the standard reflects a successful attempt to satisfy the requirements of CALEA, while balancing that Act's competing policy goals (of preserving public safety, individual privacy and technological innovation). Perhaps the most demonstrative evidence of this careful balance is the fact that the two parties challenging the standard, the Federal Bureau of Investigation ("FBI") and the Center for Democracy and Technology, alternate in defending J-STD-025 against the other's criticism. Based on this record, the Telecommunications Industry Association ("TIA") joins the majority of commenting parties in urging the Commission to dismiss the conflicting challenges and adopt J-STD-025 without modification.

As TIA noted in its previous comments, the Commission has already reached this tentative conclusion regarding four of the eleven proposed modifications at issue in this proceeding -- conclusions with which TIA agrees. TIA also endorses the Commission's appropriate conclusion to limit its review to these eleven items and not to "reexamine any of the uncontested technical requirements of the J-STD-025 standard." As for the remaining seven items, TIA (and, indeed, most commenting parties) continue to believe that the Commission should determine that these proposed modifications similarly are not required by CALEA.

The Commission properly separates its analysis of these contested modifications into two parts. First, the Commission must determine whether a modification falls within the

scope of Section 103(a) -- including the related determination of whether call-identifying information is “reasonably available.” Second, the Commission must determine whether a modification is consistent with the cost, privacy and other considerations enumerated in Section 107(b). The commenters overwhelmingly agree that the parties challenging J-STD-025 -- in particular, the FBI -- fail to carry their burden under either prong of this analysis.

If, however, the Commission were to determine that J-STD-025 is deficient, TIA supports the Commission’s proposed method of modifying the standard. Specifically, TIA endorses the Commission’s proposal to delegate the responsibility to make technical revisions in J-STD-025 to TIA’s Engineering Subcommittee TR 45.2. TIA also urges the Commission to establish a transition period of no less than 36 months from June 30, 2000 (the Commission’s deadline for the “core” J-STD-025) for carriers to comply with the Commission’s decision. This transition period would provide manufacturers approximately 24 months to design and develop the software and hardware modifications necessary to implement the Commission’s order and would provide carriers roughly another 12 months to install and test these modifications.

Finally, TIA urges the Commission to clarify that its decision in this proceeding does not apply to other technologies not covered by J-STD-025. As several parties have noted, “technological differences between services, and the text of CALEA . . . limit the Commission’s decisions in this rulemaking to the wireline, cellular and broadband PCS carriers expressly included in J-STD-025.” The Commission should defer to and encourage the ongoing efforts by other sectors of the telecommunications industry to comply with CALEA’s obligations and should appreciate that, despite their best efforts, compliance by June 30, 2000 for these other technologies may not be achievable.

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The Telecommunications Industry Association ("TIA")¹ respectfully submits these reply comments on the Commission's *Further Notice of Proposed Rulemaking*,² regarding implementation of the Communications Assistance for Law Enforcement Act ("CALEA").³ TIA appreciates the Commission's thoughtful attention to this matter and urges the Commission to act as swiftly as possible to resolve the remaining disputes regarding the industry CALEA

¹ TIA is a national, full-service trade association of over 900 small and large companies that provide communications and information technology products, materials, systems, distribution services and professional services in the United States and around the world. TIA is accredited by the American National Standards Institute ("ANSI") to issue standards for the industry.

² Further Notice of Proposed Rulemaking, *In the Matter of Communications Assistance for Law Enforcement Act*, FCC No. 98-282, CC Docket No. 97-213 (released on Nov. 5, 1998) ("Further Notice").

³ Pub. L. 103-414, 108 Stat. 4279 (1994), *codified at* 47 U.S.C. §§ 1001 *et seq.*

standard for wireline, cellular and broadband Personal Communications Services ("PCS") technologies -- J-STD-025.⁴

I. Introduction

The most recent round of comments in this proceeding confirms the positions taken by TIA in its previous filings. As the vast majority of commenters agree, the record clearly establishes that J-STD-025 satisfies the requirements of CALEA, while preserving a careful balance between CALEA's competing interests in public safety, individual privacy, and technological innovation.⁵ Even the two parties who have challenged J-STD-025 -- the Federal Bureau of Investigation ("FBI") and the Center for Democracy and Technology ("CDT") -- alternate in defending the standard against the other's criticism.⁶ Accordingly, based on the

⁴ TIA and Alliance for Telecommunications Industry Solutions, J-STD-025, *Lawfully Authorized Electronic Surveillance*, Interim Standard (December 1997).

⁵ See, e.g., Comments of AirTouch Communications, Inc. (Dec. 14, 1998) ("AirTouch Comments"); Comments of AT&T Corporation (Dec. 14, 1998) ("AT&T Comments"); Comments of Ameritech Corporation, *et al.* (Dec. 14, 1998); Comments of Bell Atlantic (Dec. 14, 1998); Comments of Bell Atlantic Mobile, Inc. (Dec. 14, 1998) ("BAM Comments"); Comments of BellSouth Corporation, *et al.* (Dec. 14, 1998) ("BellSouth Comments"); Comments of the Cellular Telecommunications Industry Association (Dec. 14, 1998) ("CTIA Comments"); Comments of GTE Service Corporation, *et al.* (Dec. 14, 1998) ("GTE Comments"); Comments of Nextel Communications, Inc. (Dec. 14, 1998) ("Nextel Comments"); Comments of the Personal Communications Industry Association (Dec. 14, 1998) ("PCIA Comments"); Comments of the Rural Cellular Association (Dec. 14, 1998); Comments of SBC Communications, Inc. (Dec. 14, 1998) ("SBC Comments"); Comments of United States Cellular Corporation (Dec. 15, 1998); Comments of U.S. West, Inc. (Dec. 14, 1998) ("U.S. West Comments"); Comments of the United States Telephone Association (Dec. 14, 1998) ("USTA Comments").

⁶ See Comments of the Center for Democracy and Technology, at 4 (Dec. 14, 1998) ("On the additional capabilities sought by the FBI (the so-called "punch list"), CDT is in agreement with industry. Our views were made clear in our May 20, 1998 and June 12, 1998 filings, in which we explained why none of the punch list items is required by the statute and

(Continued ...)

already extensive record developed by this and prior rounds of filings,⁷ the Commission should dismiss these conflicting challenges and adopt J-STD-025 without modification.

As U.S. West notes, the Commission properly separates its analysis of the proposed modifications of J-STD-025 into two parts: “first, whether a capability falls within the scope of Section 103(a) and, second, whether such a capability can be justified in light of the cost, privacy and other considerations enumerated in Section 107(b).”⁸ The commenters overwhelmingly agree that the parties challenging J-STD-025 -- in particular, the FBI and DoJ -- fail to carry their burden under either prong of this analysis. Indeed, perhaps sensing the fundamental weaknesses in its challenge, the FBI suddenly raises three entirely new arguments in its last round of comments.

First, perhaps recognizing that it has failed to prove that any of its punch list is required by Section 103(a), the FBI attempts to read out that section’s “reasonably available” limitation -- suggesting that the Commission “need not and should not use this standard-setting proceeding to determine whether [call-identifying information] is reasonably available to particular carriers or platforms.”⁹ Instead, the FBI suggests that the Commission adopt a new definition of “reasonably available” call-identifying information and “leave the application of

why several of them have serious privacy implications.”); Comments of the U.S. Department of Justice and Federal Bureau of Investigation, at 74 (Dec. 14, 1998) (“[W]e agree with the Commission’s tentative conclusion regarding location information, and we do not believe that CALEA requires the Commission to modify the J-Standard’s packet mode provisions in the manner urged by CDT.”) (“DoJ/FBI Joint Comments”).

⁷ See also the several rounds of comments on the Commission’s Public Notice, *In the Matter of Communications Assistance for Law Enforcement Act*, DA 98-762, CC Docket No. 97-213 (released on April 20, 1998) and the numerous petitions filed in the same docket.

⁸ U.S. West Comments, at i.

⁹ DoJ/FBI Joint Comments, at 45.

that definition to be worked out by individual carriers and law enforcement on a case-by-case basis.”¹⁰ As discussed below, this attempt to give law enforcement the ability to decide what information is “reasonably available” is expressly contrary to CALEA.

Second, the FBI seeks to add a new item to its punch list -- demanding that the Commission replace J-STD-025’s treatment of “reasonably available” call-identifying information with a completely new definition.¹¹ TIA has reviewed the FBI’s previous filings and this newly-discovered “deficiency” in J-STD-025 appears nowhere: not in the FBI’s deficiency petition nor its 18 pages of proposed rules,¹² not in the FBI’s extension comments filed on May 8¹³ nor its reply comments filed on May 15,¹⁴ not even in the FBI’s deficiency comments filed on May 20¹⁵ nor its reply comments filed on June 12.¹⁶ This last-minute criticism of J-STD-025 even fails to appear in any of the FBI’s or Department of Justice’s previous summaries of the

¹⁰ *Id.*, at 45-46 (emphasis added).

¹¹ *Id.*, at 24-25.

¹² Joint Petition for Expedited Rulemaking by the U.S. Department of Justice and FBI, CC Docket No. 97-213 (filed on March 27, 1998) (“DoJ/FBI Joint Petition”).

¹³ Comments Regarding the Commission’s Authority to Extend the October 25, 1998 Compliance Date by the U.S. Department of Justice and FBI, CC Docket No. 97-213 (filed on May 8, 1998).

¹⁴ Reply Comments Regarding the Commission’s Authority to Extend the October 25, 1998 Compliance Date by the U.S. Department of Justice and FBI, CC Docket No. 97-213 (filed on May 15, 1998).

¹⁵ Comments Regarding Standards for Assistance Capability Requirements by the U.S. Department of Justice and FBI, CC Docket No. 97-213 (filed on May 20, 1998) (“Joint Deficiency Comments”).

¹⁶ Reply Comments Regarding Standards for Assistance Capability Requirements by the U.S. Department of Justice and FBI, CC Docket No. 97-213 (filed on June 12, 1998).

punch list¹⁷ -- including the February 3, 1998 letter by Assistant Attorney General Stephen R. Colgate in which the Department summarized its official analysis of the punch list items.¹⁸ Of course, throughout the entire process of developing J-STD-025, industry has been dealing constantly with ever-changing DoJ/FBI views of what is required under CALEA, so this most recent change of opinion is not surprising.

In its Further Notice, the Commission properly concluded that it would not “reexamine any of the uncontested technical requirements of the J-STD-025 standard. Instead, we will make determinations only regarding whether each of the location and packet-mode provisions currently included within J-STD-025, and the nine punch list items that are currently not included, meet the assistance capability requirements of Section 103.”¹⁹ As discussed below, TIA strongly supports the Commission’s conclusion. Any other, newly-alleged “deficiencies” should not be entertained.

Finally, the FBI seeks to sidestep the fact that none of its requested modifications are consistent with the policy considerations enumerated by Congress in Section 107(b).²⁰

¹⁷ See February 12, 1997 FBI Description of the Punch List (attached as Appendix 1 to Comments of the Telecommunications Industry Association, CC Docket No. 97-213 (filed on May 20, 1998) (“TIA Deficiency Comments”)); August 29, 1997 FBI Slide Presentation on the Punch List (attached as Appendix 2 to TIA Deficiency Comments); December 5, 1998 FBI Comments/Clarifications of the Punch List (attached as Appendix 3 to TIA Deficiency Comments).

¹⁸ Letter from Assistant Attorney General Stephen R. Colgate, February 3, 1998 (attached as Appendix 4 to TIA Deficiency Comments).

¹⁹ Further Notice, ¶ 45.

²⁰ As the Commission notes, Section 107(b) specifies five factors that the Commission must consider before establishing technical requirements to meet the assistance capability requirements of Section 103. These five factors require that the Commission’s eventual Report and Order must:

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Congress was explicit that “[i]n taking any action under this section, the FCC is directed to protect the privacy and security of communications that are not the targets of court-ordered electronic surveillance and to serve the policy of the United States to encourage the provision of new technologies and services to the public.”²¹

Rather than even attempt to demonstrate that their punch list is consistent with such statutory considerations, however, the Department of Justice and FBI now seek to claim that Section 107(b) merely provides guidance to the Commission, contradicting their own previous submissions regarding the importance of these factors.²² The FBI’s new, tortured

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- (1) meet the assistance capability requirements of Section 103 by cost-effective methods;
 - (2) protect the privacy and security of communications not authorized to be intercepted;
 - (3) minimize the cost of such compliance on residential ratepayers;
 - (4) serve the policy of the United States to encourage the provision of new technologies and services to the public; and
 - (5) provide a reasonable time and conditions for compliance with and the transition to any new standard, including defining the obligations of telecommunications carriers under Section 103 during any transition period.

CALEA, § 107(b), 47 U.S.C. § 1006(b).

²¹ H.R. Rep. No. 103-827, at 27 (1994) (“House Report”) (emphasis added). After the publication of the House Report, Congress amended Section 107(b) to add the additional requirements that the Commission must also “minimize the cost of such compliance on residential ratepayers” and “meet the assistance capability requirements of Section 103 by cost-effective methods.” Nowhere did Congress state that these mandates were mere suggestions that the Commission could ignore, unless a “deficiency may be corrected in more than one way.” DoJ/FBI Joint Comments, at 1.

²² DoJ/FBI Joint Petition, at 59-63.

interpretation of Section 107(b) is expressly contrary to the statutory provision and its legislative history, which mandates that the Commission balance not only the interests of law enforcement, but also individual privacy, economic realities and technological innovation before supplanting an industry standard. TIA, and the vast majority of commenters, continue to believe that J-STD-025 represents a successful attempt to reconcile such competing interests. The Commission should not upset this careful balance.

If, however, the Commission were to determine that J-STD-025 is deficient, TIA supports the Commission's proposed method of modifying the standard. Specifically, TIA endorses the Commission's proposal to delegate the responsibility to make technical revisions in J-STD-025 to TIA's Engineering Subcommittee TR 45.2.²³ TIA also urges the Commission to establish a transition period of no less than 36 months from June 30, 2000 (the Commission's deadline for the "core" J-STD-025) for carriers to comply with the Commission's decision. This transition period would provide manufacturers approximately 24 months to design and develop the software and hardware modifications necessary to implement the Commission's order and would provide carriers roughly another 12 months to install and test these modifications.

Finally, TIA urges the Commission to clarify that its decision in this proceeding does not apply to other technologies not covered by J-STD-025. As several parties have noted, "technological differences between services, and the text of CALEA . . . limit the Commission's decisions in this rulemaking to the wireline, cellular and broadband PCS carriers expressly

²³ Further Notice, ¶¶ 132 & 133. The Commission's proposal has received strong support from commenting parties. *See, e.g.*, AT&T Comments, at 2, 3 & 22-23; CTIA Comments, at ii & 36; DoJ/FBI Joint Comments, at 30; GTE Comments, at iii & 13; Nextel Comments, at 25; PCIA Comments, at iv; SBC Comments, at 18; Comments of the Telecommunications Industry Association, at iii & 7-16 (Dec. 14, 1998) ("TIA Comments"); U.S. West Comments, at ii & 29-31; USTA Comments, at 2.

included in J-STD-025.”²⁴ The Commission should defer to and encourage the ongoing efforts by other sectors of the telecommunications industry to comply with CALEA’s obligations and should appreciate that, despite their best efforts, complete compliance by June 30, 2000 for these other technologies may not be achievable.

II. Implementing the Commission’s Report and Order

As discussed in TIA’s previous comments (and, indeed, those of most commenting parties), TIA continues to believe that J-STD-025 is not deficient and that the Commission should recognize it, without modification, as the final capability standard for the wireline, cellular and broadband PCS industries. However, should the Commission determine that modifications are required, TIA endorses the Commission’s proposed method for implementing these modifications: 1) referring the standard back to Subcommittee TR 45.2 for revision, and 2) establishing a reasonable transition period for carriers to implement the revised standard.

A. Standardization of the Commission’s Report and Order

TIA is pleased that so many of the commenting parties -- including the FBI -- endorse the Commission’s tentative conclusion to remand any technical modifications that might be required in J-STD-025 to TIA’s Engineering Subcommittee TR 45.2.²⁵ As the Commission noted, “the Subcommittee already has the experience and resources in place to resolve these

²⁴ PCIA Comments, at iv.

²⁵ *See, supra*, note 23.

issues more quickly [and] a Commission-based standard-setting activity would necessarily have to rely heavily on the Subcommittee to modify J-STD-025 in any event”²⁶

Even though industry does not believe that any changes are required in J-STD-025 (and, in fact, a revision effort would preclude other important standards work), Subcommittee TR 45.2 takes the Commission’s possible delegation very seriously. Indeed, at its December 1998 plenary meeting, the Subcommittee adopted several contributions to put in place the structure necessary should a standards effort result from this proceeding.²⁷ Specifically, the Subcommittee modified and approved two project requests submitted by BellSouth to authorize work to revise J-STD-025 and to ballot a revised standard (to be identified as “J-STD-025-A”) as an Interim/Trial Use Standard and as an American National Standard. The approved project requests do not specify an anticipated schedule for balloting a revised standard; instead, the requests leave the timeframe of the revision project open, so as to be responsive to any final order from the Commission. However, members of the Subcommittee have discussed that a year to develop and ballot a standard would be an appropriate length of time.

Subcommittee TR 45.2 also approved the recommendation to establish an Ad Hoc Group (“LAES”) to address this possible revision work. The AT&T Wireless Services representative, who has chaired similar CALEA-related working groups in the past, was asked to convene this ad hoc group as soon as the Commission’s Report and Order was issued if revision work were required.

²⁶ Further Notice, ¶ 132.

²⁷ See TR 45.2/99.01.04.02, *Summary of Meeting: Subcommittee TR 45.2, Wireless Intersystem Technology, December 14-18, 1998* (attached as Appendix A).

As TIA stated in its previous comments, although 180 days for a balloted and approved standard is not possible,²⁸ TIA will make every effort (consistent with its responsibilities as an ANSI-accredited standards-setting body) to expedite any modification of J-STD-025. One suggestion that TIA has made to further expedite any standardization effort is that Commission staff participate in the revision process. TIA is pleased to note that the FBI endorses this suggestion.²⁹ Such representatives would be able to provide input from the Commission directly into the formulating group and, hopefully, would be able to avoid disputes that might emerge. Direct participation by the Commission should also obviate the need for the cumbersome review process suggested by the FBI.³⁰ Such participation would be consistent with Congressional direction under the National Technology Transfer and Advancement Act and

²⁸ The FBI's insistence that "industry must finish the balloting process within the 180-day period," DoJ/FBI Joint Comments, at 33, simply ignores the responsibilities that TIA has as an ANSI-accredited organization. TIA does not have the luxury to truncate the ANSI-required public comment period, to refuse to coordinate with ANSI staff on the release of the balloted text, to ignore ballot comments, or to skip over final review by ANSI's Board of Standards Review. *See also* U.S. West Comments, at 30-31. The Commission should also remember that TIA does not (and cannot) control or manage the actual work of the formulating group. TIA provides the forum and the ANSI-approved process (including certain time intervals for balloting). The participants -- including the DoJ and FBI -- control the speed of the consensus decisions by how quickly issues can be resolved. Compared to most other TIA standards, J-STD-025 took a painfully long and expensive process to get as far as it did, including unwarranted (and eventually retracted) challenges by the FBI to ANSI about TIA's accreditation.

²⁹ However, TIA sees no reason to restrict the Commission's participation to that of mere "observers." DoJ/FBI Joint Comments, at 33-34. Instead, TIA would urge the Commission to participate fully as the government representative under Section 3.2.4 of TIA's Engineering Manual. Other TIA formulating groups have benefited from such direct Commission participation in the past.

³⁰ DoJ/FBI Joint Comments, at 31-32.

Office of Management and Budget Circular A-119.³¹ Of course, members of the privacy community and law enforcement are also strongly encouraged to participate.

TIA is also pleased that the FBI agrees that the Commission's "Report and Order should be as precise as possible in describing the capabilities that are to be added"³² A large reason for the continued disputes between law enforcement and industry over the punch list has been law enforcement's vague, ambiguous and ever-changing requests. Regrettably, as TIA has explained in its previous filings, the FBI's proposed regulations fail to provide this necessary specificity -- including the same broad, vague requests that have confused industry engineers for so many years.³³ A more specific and detailed final Order would reduce subsequent debate within Subcommittee TR 45.2 and would facilitate the completion of a revised standard in a more expeditious manner.

B. Reasonable Implementation Period

TIA appreciates that "[g]iven the current timetable for this proceeding, the government recognizes that compliance with new provisions that are added to J-Standard may not be feasible by June 30, 2000."³⁴ However, the FBI's proposed implementation period of "*no*

³¹ *National Technology Transfer and Advancement Act*, Pub. L. 104-113 (1996); Office of Management and Budget Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, 63 Fed. Reg. 8545 (February 19, 1998).

³² DoJ/FBI Joint Comments, at 34.

³³ *See, e.g.*, DoJ/FBI Joint Petition, Appendix 1, at 8 ("Telecommunications carriers shall ensure that their equipment, facilities, or services are capable of providing law enforcement with access to all subject-initiated dialing and signaling") (emphasis added).

³⁴ DoJ/FBI Joint Comments, at 29.

later than 18 months after the new standards are published pursuant to this proceeding”³⁵ is ambitious -- even if the 18-month period only sets the deadline for which manufacturers must make software and hardware modifications “generally available.”

As the Commission is aware, manufacturers normally require at least 24 months from the existence of a stable technical standard to design, develop, test and make generally available the software and hardware necessary to comply with that standard.³⁶ Because of the technical difficulty of several of the punch list items (such as In-band and Out-of-Band Signaling and Surveillance Status Message), however, many manufacturers might require as much as 30-36 months to complete development of these features. Even once upgrades are generally available, carriers -- working with their manufacturers -- usually require a subsequent nine to twelve months to purchase, test, and install this equipment in all of their facilities.³⁷ Thus, TIA recommended that the Commission establish a transition period that would give carriers no less than three years, from the completion of a revised J-STD-025, to deploy the equipment necessary to implement the Commission’s decision.³⁸

³⁵ *Id.* (emphasis in original).

³⁶ Memorandum Opinion and Order, *In the Matter of Petition for the Extension of the Compliance Date under Section 107 of the Communications Assistance for Law Enforcement Act*, FCC No. 98-223, CC Docket No. 97-213 (released on September 11, 1998), ¶ 47. *See also* comments and petitions filed in that proceeding.

³⁷ *Id.*, ¶ 48. *See also* AirTouch Comments, at 28; USTA Comments, at 10 (“[A] large wireline carrier would require approximately twelve months from the time a software product is generally available to make a generic switch upgrade in every switch. An additional year will be required to install a hardware product and/or additional generic loads which may be necessary depending upon the switch.”).

³⁸ TIA Comments, at 17-20. As GTE observes, the initial implementation of local number portability is a very useful comparison for roughly measuring the deployment effort faced by industry in implementing CALEA. GTE Comments, at 13-16.

It is important to appreciate, however, that even once a revised version of J-STD-025 is available, most manufacturers will not be able to begin their design and development work until development and installation of the “core” J-STD-025 features is complete. Because of the resource constraints created by manufacturers’ efforts to develop and deliver the core J-STD-025, manufacturers will be unable to initiate work on the revised standard until the engineering teams currently devoted to the core J-STD-025 have completed their work and are able to turn to the revision.³⁹ For that reason, several parties have suggested that the Commission postpone the compliance date for the “core” J-STD-025, setting a single date for compliance with the core standard and any revisions required by this proceeding.⁴⁰ As TIA explained in its initial *Petition for Rulemaking*, such a unified deployment is more efficient.⁴¹ At the same time, however, many of the inefficiencies affiliated with a phased solution already have been incurred, as TIA members have committed the resources to implement CALEA in phases.

Accordingly, TIA would respectfully suggest that the Commission establish a transition period of approximately 36 months from June 30, 2000 (the Commission’s deadline

³⁹ Wireline, cellular and broadband PCS manufacturers and carriers are working closely to comply with the Commission’s extension of the compliance deadline for the “core” J-STD-025. In fact, partial solutions for most (if not all) platforms should be available by that date. However, simply because of the variety of architectures and systems employed by the industry, complete solutions consistent with the “core” J-STD-025 for all platforms may not be possible. Also, as several carriers note, “the nationwide ‘roll-out’ of these upgrades -- the delivery, installation, testing and implementation of their capabilities -- will not likely be fully achievable by the deadline.” AirTouch Comments, at 30. *See also* BellSouth Comments, at 6; SBC Comments, at 18-19; USCC Comments, at 7; USTA Comments, at 10. As a result, the Commission should recognize that additional extensions may be necessary.

⁴⁰ *See, e.g.*, BAM Comments, at 3 & 13-14; GTE Comments, at iii & 16; SBC Comments, at 19.

⁴¹ *Petition for Rulemaking by the Telecommunications Industry Association*, CC Docket No. 97-213, at 5-7 (April 2, 1998).

for the “core” J-STD-025) for carriers to implement any revisions to J-STD-025. The Commission should also consider the proposal to set a unified deadline for a comprehensive CALEA solution (*i.e.*, encompassing both the core standard and any revisions required by this proceeding).

III. Reasonably Available and the Section 107(b) Factors

As the Commission properly emphasized, two of the most important statutory provisions it must consider in this proceeding are the five factors enumerated in Section 107(b) and Section 103(a)(2)’s restriction that only call-identifying information that is “reasonably available” to a carrier must be provided to law enforcement. Amazingly, the FBI’s comments ignore the heart of the matter pending before the Commission. Rather than address these statutory criteria, the FBI first attempts to read out Section 103’s “reasonably available” limitation and, then, urges the Commission to ignore the Section 107(b) factors in reaching its decision.

A. “Reasonably Available”

The Commission is correct to place great emphasis on Congress’ qualification that only call-identifying information that is “reasonably available to the carrier” must be provided to law enforcement.⁴² This limitation is consistent with Congress’ intent for CALEA to be interpreted narrowly,⁴³ as well as the long-standing judicial principle that parties providing

⁴² CALEA, § 103(a)(2), 47 U.S.C. § 1002(a)(2).

⁴³ House Report, at 23.

assistance to law enforcement cannot be asked to undertake burdens that are unreasonable.⁴⁴ The FBI, however, seeks to read this term out of CALEA entirely.

The FBI first urges the Commission that it

need not and should not use this standard-setting proceeding to determine whether [call-identifying information] is reasonably available to particular carriers or platforms. Instead, the Commission should frame an appropriate definition of “reasonably available” and leave the application of that definition to be worked out by individual carriers and law enforcement on a case-by-case basis.⁴⁵

This unprecedented effort to avoid Commission oversight should be rejected. First -- while it is true that, under J-STD-025, what call-identifying information is reasonably available may vary from carrier to carrier and system to system -- this is generally not the case with the FBI’s punch list. As TIA has explained, most, if not all, of the alleged “call-identifying information” within the FBI’s punch list is not reasonably available to most carriers because telecommunications equipment generally does not collect or process the type of information sought by the FBI.⁴⁶

Second, the FBI’s proposal is directly contrary to Congress’ intent that the Commission (and *not* the FBI) should resolve technical disputes. As Congress noted, CALEA “expressly provides that law enforcement may not dictate system design features”⁴⁷ Instead, rejecting original legislative proposals that would have given the FBI the authority to

⁴⁴ TIA Comments, at 20-21.

⁴⁵ DoJ/FBI Joint Comments, at 45-46 (emphasis added).

⁴⁶ TIA Comments, at 24.

⁴⁷ House Report, at 19. *See also* House Report, at 23; CALEA, § 103(b), 47 U.S.C. § 1002(b).

mandate system architectures, Congress provided the Commission with principal responsibility to resolve technical disputes⁴⁸ -- a responsibility that the FBI seeks to circumvent.

In addition to urging the Commission not to make a determination on whether its punch list features are “reasonably available,” the FBI has decided to add a new item to its punch list. Specifically, the FBI now demands that the Commission replace J-STD-025’s treatment of “reasonably available” call-identifying information, which the FBI considers gravely deficient:

To deal with these problems, the J-Standard’s definition needs to be modified in the following respects. First, the requirement that call-identifying information be present “for call processing purposes” should be dropped. Second, the categorical exclusion of network protocol modifications should be removed. Third, the set of IAPs employed by the carrier must reflect a reasonable effort to provide access to the call-identifying information carrier by the ‘equipment, facilities or services that provide [the] customer or subscriber with the ability to originate, terminate, or direct communications’.⁴⁹

In order to rectify these alleged deficiencies, the FBI proposes an entirely new definition:

Call-identifying information is reasonably available if (1) it is present in an element in the carrier’s network that is used to provide the subscriber with the ability to originate, terminate, or direct communications and (2) it can be accessed there, or can be delivered to an IAP located elsewhere, without reasonably affecting the call processing capabilities of the network.⁵⁰

TIA has reviewed the FBI’s previous filings with the Commission and cannot find any mention of this new-found “deficiency” in J-STD-025 nor its proposed replacement definition -- not in any of the FBI’s previous four rounds of comments, not in any of its numerous *ex parte* filings. Perhaps most damning, this “deficiency” appears nowhere in the

⁴⁸ See CALEA, § 107(b), 47 U.S.C. § 1006(b); House Report, at 27.

⁴⁹ DoJ/FBI Joint Comments, at 24.

⁵⁰ *Id.*, at 25.

FBI's 67-page Joint Petition for Expedited Rulemaking or its 18 pages of proposed regulations.⁵¹

In fact, the proposed regulations actually contain a suggested definition of call-identifying information that looks nothing like that proposed in the FBI's most recent filing.⁵²

Similarly, this proposed modification to J-STD-025 has never been identified in any of the FBI's or Department of Justice's previous summaries of the punch list, including the February 3, 1998 letter by Assistant Attorney General Stephen R. Colgate in which the Department summarized its official analysis of the punch list items.⁵³ Indeed, as a result of the FBI's continued practice of proposing new changes to J-STD-025, the Attorney General -- in a March 18, 1998 letter to industry -- essentially promised that the government sought no additional modifications to J-STD-025 beyond the eleven "deficiencies" outlined in Assistant Attorney General Colgate's letter.⁵⁴

The Commission should hold the Attorney General to her word. The FBI's last-minute addition of yet another proposed modification to its punch list is a perfect example of the vacillating requirements that have so frustrated industry. As discussed below, the Commission has properly decided to limit its rulemaking to the location and packet-mode provisions

⁵¹ Throughout its filings the FBI repeatedly has urged the Commission to adopt its proposed rule, which it has characterized as eliminating all alleged deficiencies in J-STD-025. *See, e.g.*, Joint Deficiency Comments, at 3.

⁵² DoJ/FBI Joint Petition, Appendix 1, at 2.

⁵³ *See, supra*, note 17-18. TIA even reviewed the FBI's several hundred pages of ballot comments on J-STD-025 and, although the FBI proposed modifications to virtually every provision of J-STD-025 (including this one), the replacement definition proposed here was never suggested. Indeed, the FBI never raised a single objection to the "for call processing purposes" language that is the heart of J-STD-025's provision and to which the FBI now so violently objects.

⁵⁴ Letter from Attorney General Janet Reno, March 18, 1998 (attached as Appendix 5 to TIA Deficiency Comments).

challenged by the CDT and the nine punch list items addressed in the FBI's petition.⁵⁵ TIA endorses the Commission's conclusion -- to add any additional proposed modifications at this point would require more rounds of public comment and add to the delay already caused by the FBI in industry's efforts to implement CALEA.

Moreover, the FBI's proposed modification greatly expands the scope of Section 103(a). Congress strongly "urged against overbroad interpretation" of this section and made it clear that it expected "industry, law enforcement and the FCC to narrowly interpret the requirements."⁵⁶ The FBI, however, seeks to circumvent these restrictions by defining the term "reasonably available" in a manner that would render this important limitation effectively meaningless.

First, the FBI criticizes J-STD-025 for "impos[ing] no requirements regarding where or how IAPs are to be situated within a network."⁵⁷ As a result, the FBI proposes that call-identifying information should be deemed reasonably available if "it is present in an element in the carrier's network"⁵⁸ The FBI's criticism is in direct conflict with Congress' explicit statement that a "carrier need not insure that each component of its network or system complies with the requirements [of Section 103]."⁵⁹ It also violates CALEA's express restriction that "law

⁵⁵ Further Notice, ¶ 45.

⁵⁶ House Report, at 22-23.

⁵⁷ DoJ/FBI Joint Comments, at 21.

⁵⁸ *Id.*, at 25.

⁵⁹ House Report, at 23 (emphasis added). The rest of the passage continues ". . . so long as each communication can be intercepted at some point that meets the legislated requirements." *Id.* This is exactly what J-STD-025 does. Contrary to the FBI's apocalyptic suggestion that "[a] carrier may select IAPs that seriously limit, or even prevent altogether, the collection of call-identifying information," DoJ/FBI Joint Comments, at 22, industry is devoting
(Continued ...)

enforcement agencies are not permitted to require the specific design of systems or features.”⁶⁰

Moreover, as TIA has previously demonstrated, the FBI’s suggestion that “reasonably available” means available in any element in any provider’s network is inconsistent with the text and legislative history of CALEA as well as the very structure of the telecommunications network.⁶¹

Second, the FBI criticizes J-STD-025 for providing that “network protocols do not have to be modified for the purpose of transmitting call-identifying information.”⁶² It simply strains all credibility for the FBI to argue that information -- that could not be obtained without changes to such fundamental network protocols as SS7 and IS-41-- is “reasonably available.” Congress expressly provided that if call-identifying “information is not reasonably available, the carrier does not have to modify its system to make it available.”⁶³ TIA can think of no modification that would so fundamentally modify not just a single carrier’s system, but the entire telecommunications network, as re-writing such basic protocols.

Finally, the FBI claims that the “J-Standard’s requirement that call-identifying information be present at an IAP ‘for call-processing purposes’ is likewise problematic,” suggesting that it “engrafts” some sort of *ultra vires* restriction on CALEA.⁶⁴ To the contrary,

hundreds of millions of dollars in scare capital resources to develop IAPs that will provide law enforcement with access to all communications and all reasonably available call-identifying information (including when a call was attempted, by whom the call was attempted, what was the original destination of the call, whether the call was redirected or forwarded, how the call was terminated, whether additional parties were added to form a conference call, etc.).

⁶⁰ House Report, at 23. *See also* CALEA, § 103(b)(1), 47 U.S.C. § 1002(b)(1).

⁶¹ TIA Comments, at 8-10.

⁶² DoJ/FBI Joint Comments, at 22.

⁶³ House Report, at 22.

⁶⁴ DoJ/FBI Joint Comments, at 23.

this provision (like all of the FBI's newly-discovered, alleged deficiencies) represent a careful attempt by the industry's best system engineers to make a technical evaluation of what information is "reasonably available" within modern telephony systems. This reasonable, technical interpretation is fully consistent with CALEA and entitled to deference.⁶⁵ As Congress repeatedly explained, "[t]he legislation provides that the telecommunications industry itself shall decide how to implement law enforcement's requirements . . . [t]his means that those whose competitive future depends on innovation will have a key role in interpreting the legislated requirements"⁶⁶ Indeed, the FBI's own ballot comments suggest that the FBI agreed with the reasonableness of this interpretation. As noted above, in several hundred pages of ballot comments on J-STD-025, the FBI never objected to the standard's "for call processing purposes" language.⁶⁷

B. Section 107(b) Criteria

As the Commission notes, Section 107(b) specifies five factors that the Commission must consider before establishing technical requirements to meet the assistance capability requirements of Section 103.⁶⁸ Rather than even attempt to demonstrate that their

⁶⁵ In fact, Congress used almost identical language to explain that call-identifying information "for voice communications . . . identify the numbers dialed or otherwise transmitted for the purpose of routing calls through the telecommunications carrier's network." House Report, at 21 (emphasis added).

⁶⁶ House Report, at 19 (emphasis added).

⁶⁷ *See, supra*, note 53.

⁶⁸ Further Notice, ¶ 29.

punch list is consistent with such statutory considerations, however, the FBI now⁶⁹ seeks to claim that Section 107(b) merely “direct[s] the Commission to take account of cost in determining *how* the assistance capability requirements are to be met, not whether they are to be met”⁷⁰ The FBI cites no legislative history for its tortured interpretation of Section 107(b) -- nor can it because its argument is expressly contrary to Congress’s intent.

As the FBI repeatedly ignores, when Congress passed CALEA it sought to balance not only the interests of law enforcement, but also those of privacy and technological innovation:

the bill seeks to balance three key policies: (1) to preserve a narrowly focused capability for law enforcement agencies to carry out properly authorized intercepts; (2) to protect privacy in the face of increasingly powerful and personally revealing technologies; and (3) to avoid impeding the development of new communications services and technologies.⁷¹

In order to preserve this balance, Congress mandated that any technical requirement the Commission might issue under its authority in Section 107(b) must “meet the assistance capability requirements of Section 103 by cost-effective methods;” “protect the privacy and security of communications not authorized to be intercepted;” “minimize the cost of such compliance on residential ratepayers;” and “serve the policy of the United States to encourage

⁶⁹ Of course, the FBI did not make the same argument in its previous filings. In fact, in their Joint Petition for Expedited Rulemaking, the FBI and DoJ implied that satisfaction of Section 107(b)’s factors was a prerequisite to Commission action. *See, e.g.*, DoJ/FBI Joint Petition, at 59.

⁷⁰ DoJ/FBI Joint Comments, at 11 (emphasis in original).

⁷¹ House Report, at 13.

the provision of new technologies and services to the public.”⁷² Congress did not indicate that these considerations were mere suggestions that the Commission could ignore or satisfy only if there were alternative means of implementation. Instead, Congress was explicit that “[i]n taking any action under this section, the FCC is directed to protect the privacy and security of communications that are not the targets of court-ordered electronic surveillance and to serve the policy of the United States to encourage the provision of new technologies and services to the public.”⁷³

Moreover, the FBI’s interpretation only addresses cost-related issues, ignoring the other statutory criteria of Section 107(b): to “protect the privacy and security of communications not authorized to be intercepted” and to “serve the policy of the United States to encourage the provision of new technologies and services to the public.” The FBI presents no evidence to demonstrate that its punch list satisfies either requirement.

To the contrary, the extensive record before the Commission clearly demonstrates that most of the punch list items would both violate individual privacy and, by requiring fundamental modifications to system architectures, hinder the provision of new technologies and services to the public. For example, as TIA has previously demonstrated, the FBI’s dialed digit extraction requirement would not only be costly to implement but would also expose all sorts of sensitive information (like credit card numbers and bank account PINs) that are transmitted as

⁷² CALEA, § 107(b)(1)-(4), 47 U.S.C. § 1006(b)(1)-(4). Section 107(b) also requires that the Commission “provide a reasonable time and conditions for compliance with and the transition to any new standard,” however, the FBI does not appear to challenge this obligation. CALEA, §107(b)(5), 47 U.S.C. § 1006(b)(5).

⁷³ House Report, at 27. After the publication of the House Report, Congress amended Section 107(b) to add the additional requirements that the Commission must also “minimize the cost of such compliance on residential ratepayers” and “meet the assistance capability requirements of Section 103 by cost-effective methods.”

post-cut-through digits.⁷⁴ Similarly, the FBI's request for the contents of conference calls -- even when the subject of the intercept order is no longer a participant -- would greatly expand Title III's "facilities" doctrine, permitting law enforcement to intercept communications to which it currently does not have access.⁷⁵

Moreover, almost all of the FBI's punch list items (*e.g.*, network generated signals, subject-initiated dialing and signaling, surveillance status message and feature status message) would require extensive development efforts to modify equipment to capture and report information that currently a carrier has no purpose to process.⁷⁶ For example, capturing all of the signals that could be covered by the FBI's vague requirements regarding in-band and out-of-band signaling -- most of which are generated by peripheral equipment without any knowledge of the serving switch -- would require massive architectural changes and a complete reversal of the current technological trend toward decentralized networks.⁷⁷

Such complicated modifications would preclude manufacturers and carriers from devoting engineering resources to other important development efforts. As several parties observed in the initial comments, industry is already attempting to implement a variety of other technical upgrades -- in order to prepare for Year 2000 compliance, to satisfy other regulatory obligations such as local number portability and E-911 requirements, and to introduce new

⁷⁴ TIA Comments, at 40-43.

⁷⁵ *Id.*, at 26-28.

⁷⁶ Of the nine punch list items still sought by the FBI, only "continuity tone check" is viewed as posing negligible technical difficulty, but even this item would require telecommunications equipment to be modified (and additional hardware installed) to provide features that the equipment otherwise has no purpose to provide.

⁷⁷ TIA Comments, at 32-35.

products and services to the marketplace.⁷⁸ The FBI's proposed modifications would force industry to defer such upgrades, in direct contravention of Congress' mandate "that compliance with the requirements in the bill will not impede the development and deployment of new technologies."⁷⁹

IV. Additional Modifications to J-STD-025

As mentioned above, TIA strongly endorses the Commission's conclusion that it will not "reexamine any of the uncontested technical requirements of the J-STD-025 standard."⁸⁰ As the Commission notes "no party has raised any specific challenges to J-STD-025 other than with respect to these issues, and we have not been presented with any compelling reason to reexamine the entire standard."⁸¹

Indeed, with the exception of the FBI's newly-discovered issue, the only parties to have suggested that the Commission expand its review are the Electronic Privacy Information Center ("EPIC"), Electronic Frontier Foundation ("EFF") and American Civil Liberties Union ("ACLU"). However, their joint comments do not identify any additional, specific deficiencies in J-STD-025 beyond the two raised by the CDT.⁸² Instead, these groups urge the Commission to issue a Notice of Proposed Rulemaking on the entire J-STD-025 because they believe that

⁷⁸ See, e.g., Nextel Comments, at 24-25; USTA Comments, at 9-10.

⁷⁹ House Report, at 19.

⁸⁰ Further Notice, ¶ 45.

⁸¹ *Id.*

⁸² TIA also notes that the EPIC, EFF and ACLU have never filed a petition challenging J-STD-025 as deficient under Section 107.

“public interest organizations dedicated to upholding the public’s right to privacy did not have an effective voice in the proceedings that led up to the J-STD-025 standard”⁸³

As TIA explained in its initial comments, participation in a formulating group is open to any entity with a direct and material interest in a standard.⁸⁴ For that reason, TIA respectfully takes exception to the suggestion by the EPIC, EFF and ACLU that “law enforcement organizations and the telecommunications industry had extensive meetings to agree on a standard and organizations representing the public were excluded from these meetings.”⁸⁵ To the contrary, privacy groups are always welcome to participate in TIA’s standards-setting process. Like any other party with a material interest in a standard, these groups could have joined the formulating group by applying to TIA and paying the appropriate “non-member engineering participation fee.” Moreover, even without joining the formulating group, these parties could have commented on the standards when they were released for ANSI public ballot as at least one privacy group -- the Center for Democracy and Technology -- did.

As TIA previously suggested, perhaps these groups were not aware that they could have participated in the standards-setting process. Hopefully, now that they are, TIA encourages them to participate in any standards effort that might result from this proceeding.

⁸³ Comments of the Electronic Privacy Information Center, *et al.*, at 33 (Dec. 14, 1998) (“EPIC Comments”). TIA is uncertain what an additional round of rulemaking would accomplish, other than further delay and complicate CALEA compliance. Since last March, any interested parties could certainly have filed either a petition or comments on the Commission’s Public Notice, identifying any additional, alleged deficiencies in J-STD-025.

⁸⁴ TIA Comments, at 7-17.

⁸⁵ EPIC Comments, at 33.

V. Technologies Not Covered by J-STD-025

Finally, TIA wishes to address the Commission's request for "comment on what role, if any, the Commission can or should play in assisting those telecommunications carriers not covered by J-STD-025 to set standards for, or to achieve compliance with, CALEA's requirements."⁸⁶ As the Commission is aware both from this round of comments and previous proceedings, the FBI has focused its resources and efforts on "wireline, cellular, and broadband PCS carriers, the telecommunications carriers whose compliance with CALEA's assistance capability requirements is of most immediate concern to law enforcement."⁸⁷ Nevertheless, CALEA compliance for other services is proceeding.⁸⁸

These industry-led efforts are consistent with Congress' intent that "the telecommunications industry itself shall decide how to implement law enforcement's requirements."⁸⁹ As the Commission has noted, Congress gave industry the first opportunity to develop standards so that "those whose competitive future depends on innovation will have a key role in interpreting the legislated requirements and finding ways to meet them without impeding the deployment of new services."⁹⁰ The Commission should defer to and encourage these

⁸⁶ Further Notice, ¶ 141.

⁸⁷ DoJ/FBI Joint Comments, at 34. *See also* Further Notice, ¶ 11 & n. 26; *Implementation of Section 104 of the Communications Assistance for Law Enforcement Act*, 63 Fed. Reg. 12,218, 12,210 (March 12, 1998).

⁸⁸ *See, e.g.*, Further Notice, ¶¶ 137-139; Nextel Comments, at 23 & 26; PCIA Comments, at 34-35; Comments of Southern Communications Services, Inc., at 2-3 (Dec. 14, 1998) ("Southern Comments").

⁸⁹ House Report, at 19.

⁹⁰ *Id.*

ongoing efforts by the industry to comply with CALEA's obligations. Unless formally petitioned under Section 107, the Commission has no formal authority to do otherwise.⁹¹

The Commission should also clarify that its rulemaking in this proceeding does not apply to other technologies not covered by J-STD-025. As several parties have noted, "technological differences between services, and the text of CALEA, however, limit the Commission's decisions in this rulemaking to the wireline, cellular and broadband PCS carriers expressly included in J-STD-025."⁹² J-STD-025 and the FBI's punch list were designed specifically for wireline, cellular and broadband PCS technologies. Requirements that may be reasonable for such technologies may have absolutely no correlation in other contexts.

Finally, the Commission should recognize that compliance for these other technologies may not be possible by June 30, 2000. As the FBI has focused its energies on J-STD-025, its requirements for other industries have been left unidentified. For example, unlike the wireline, cellular and broadband PCS industries, other technologies still do not have any capacity requirements.⁹³ In December, the FBI finally initiated a proceeding to address this matter, but a Final Notice of Capacity is not expected for several years.⁹⁴ Given the absence of

⁹¹ See CALEA, § 107(b), 47 U.S.C. § 1006(b).

⁹² PCIA Comments, at iv. See also AT&T Comments, at 23; Comments of American Mobile Satellite Corporation, at 2-3 (Dec. 14, 1998); Comments of ICO Services Limited, at 2 (Dec. 14, 1998); Nextel Comments, at 26-27; Southern Comments, at 3.

⁹³ Capacity requirements are absolutely critical to any development effort. Designs are likely to differ remarkably for a capacity of "x" as opposed to a capacity of "10x." The absence of capacity requirements, therefore, presents an enormous obstacle to designing CALEA capability solutions.

⁹⁴ *Implementation of Section 104 of the Communications Assistance for Law Enforcement Act: Telecommunications Services Other than Local Exchange Services, Cellular and Broadband PCS*, 63 Fed. Reg. 70,610 (December 18, 1998).

capacity requirements, and continued confusion regarding which technologies are covered by CALEA,⁹⁵ the Commission should expect to receive additional extension requests from providers of such technologies. The Commission may wish to preempt such requests by establishing a new, blanket capability compliance deadline for such technologies consistent with their eventual capacity deadline under the FBI's Final Notice.⁹⁶ Correlating these two deadlines would restore Congress' original intent for capacity and capability to be implemented simultaneously and would avoid the need for carriers of such technologies to file extension requests while waiting for capacity requirements to be established.

VI. Conclusion

For the reasons set out in the voluminous record before it, the Commission should conclude that J-STD-025 is not "deficient" and should deny the modifications proposed by the FBI and the CDT. However, if the Commission does conclude that J-STD-025 is "deficient" in any respect, it should not adopt specific technical standards. Instead, as it has proposed, the Commission should indicate the areas of deficiency and delegate to TIA's Subcommittee TR 45.2 the task of setting such standards as may be necessary to remedy these deficiencies. The Commission should also provide the "reasonable time" specified in CALEA for transition to any

⁹⁵ See, e.g., Further Notice, ¶ 139.

⁹⁶ Under Section 104(b)(1), carriers are provided three years to comply with the FBI's Final Notice of capacity. CALEA, § 104(b)(1), 47 U.S.C. § 1003(b)(1).

new Commission-mandated standard and should clarify that its rulemaking in this proceeding does not apply to other technologies not covered by J-STD-025.

Respectfully submitted,


Telecommunications Industry Association

Stewart A. Baker
Thomas M. Barba
L. Benjamin Ederington
Steptoe & Johnson LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-3000

*Counsel for the Telecommunications
Industry Association*

Grant Seiffert
Vice President, Government Relations
Matthew J. Flanigan
President
1300 Pennsylvania Avenue, N.W.
Suite 350
Washington, DC 20004
(202) 383-1483

January 27, 1999

A

**Telecommunications Industry Association
Subcommittee TR-45.2 , Wireless Intersystem Technology
Summary of Meeting
December 14-18, 1998
Tampa, Florida
Quorum List, Members Present**

Alcatel, David Crowe
AT&T Wireless Services, Peter Musgrove
Bell Atlantic Mobile, Larry Rybar
Bellcore, Phil Audino
BellSouth, Thomas E. Richter
Compaq, Sharon Lim for Niles Parikh
CRAG, John Willse
EDS, Donald Willett
Ericsson, Bob Slocum
Fujitsu Network Communications, Ning Huang
GTE, Robert Ephraim for Cindy Deas
LG InfoComm, Peggy Yi
Lucent Technologies, Cheryl Blum
MCI Worldcom, Dave Devanathan
Motorola, Chuck Ishman
NEC, Stephen S. Jones
Nokia, Terri Brooks
Nortel, Lee Valerius for Ron Ryan
QUALCOMM, Jack Nasielski for Ed Tiedemann
Rogers CANTEL, Peter Oldfield
SCC Communications Corp, Jeff Crollick
Siemens, Bill Krehl
Sprint PCS, Larry Young for Richard Ross
Synacom, Kirk Carlson
US Cellular, Patrick Yung for Chuck Wood

Quorum List, Members Absent

AirTouch, Eric Jacques
Ameritech, Jean Alphonse
Samsung, Karl Baran
SBCTechnology Resources, Terry Watts
Sony, Mike Akar

Others Present

Bellcore, Atul Thaper
Booz Allen & Hamilton, Mike Hammer
CIS/FBI, Ward Jackson
Ericsson, Michel Houde
GTE TSI, Ben Levitan
KDD (TTC), Masayoshi Ohashi
Lucent Technologies, Terry Jacobson
Lucent Technologies, Charles Teising
Lucent Technologies, Sharat Chander
Nortel, Srinivas Somisetty
QUALCOMM, David Ott
Siemens, Frank Gay
Synacom Technology, Jack Daane

1. Call To Order and Opening Remarks

The TIA TR-45.2 Subcommittee meeting was convened on December 14, 1998, at the Wyndham Harbour Island Hotel, , Tampa, Florida, at 9:00 A.M.

2. Attendance Registration and Roll Call

Meeting attendance was recorded as indicated by the above list. Twenty-four member companies were present at the opening and quorum was established.

3. Contributions

The following contributions were introduced and numbered as follows:

- TR45.2/98.12.14.01, Agenda, Schedule, and attached correspondence, from the Chair.
- TR45.2/98.12.14.02, 1998-1999 Subcommittee Workplan, from the Chair.
- TR45.2/98.12.14.03, Report on December 2-3, 1998, TR-45 Committee Workplan, from the Chair.
- TR45.2/98.12.14.04, Correspondence from TTC regarding status of the removable UIM study in TTC, from M Ohashi.
- TR45.2/98.12.14.05, Removable UIM: Proposed first draft of a delta document, from Motorola.
- TR45.2/98.12.14.06, TR-45 ESN Administrator's Report, from J. Willse, Administrator.
- TR45.2/98.12.14.07, Global Roaming Issue of Concern, from OKI Telecom (provided by J. Willse, CRAG).
- TR45.2/98.12.14.08, PN-4173 (OTAPA) Ballot Responses, provided by the Chair.
- TR45.2/98.12.14.09, QUALCOMM's PN-4173 Ballot Response, from QUALCOMM.
- TR45.2/98.12.14.10, Clarification and additions to QUALCOMM Ballot Comment to PN-4081, from QUALCOMM.
- TR45.2/98.12.14.11, PN-4177 ESS Working Document Revision 12, from M. Hammer, Editor.
- TR45.2/98.12.14.12, Correspondence regarding 3G Capabilities, from E. Kidwell, 3G Program Manager.
- TR45.2/98.12.14.13, Correspondence regarding 3G Stage 1 requirements, from E. Kidwell, 3G Program Manager.
- TR45.2/98.12.14.14, Network Element Identifiers for Non-MSC Elements, from T. Jacobson, Liaison to AGNI.
- TR45.2/98.12.14.15, 1999 TR-45.2 Meeting Calendar, provided by the Chair.
- TR45.2/98.12.14.16, CTIA Liaison Report, from E. Hall.

4. Agenda Review and Approval

The attached agenda and schedule (TR45.2/98.12.14.01) were reviewed and approved as modified.

5. Advisory Note #11 re: Early Disclosure Policy

No responses.

6. Review of Meeting Summary

Review of the meeting summary was deferred till the next meeting.

7. Correspondence

In terms of correspondence (TR45.2/98.12.14.01), attached correspondence was provided for information purposes with the exception of

- Correspondence from TR-45.6 regarding changes to the 3G Workplan was remanded to the 3G Focus Group.
- Correspondence from Compaq requesting name change for SystemMyType Code was remanded to Working Group 3.

Contributions .04 and .05 were remanded to Working Group II for review.

8. Liaison Reports

In terms of liaison reports:

- CTIA - Contribution .16 provided the CTIA report.
- T1S1 - No report.
- T1P1 - No report.
- PCIA - No report.
- Public 800 Section - Bob Slocum, Ericsson, was appointed as liaison from TR-45.2 to the Public 800 Section.
- NENA/APCO - The Wireless Subcommittee will be meeting in San Antonio on Jan. 19, 1999. The Annual Technology Conference will be held on Feb. 28 - March 3, 1999.
- AGNI - In regard to the list of SS7 related questions, it was reported that the network providers are not using GTT or SCCP. It may be useful to have a broader distribution of the questions. Working Group III will address this issue again. AGNI is addressing some new issues related to number portability (i.e., test plan for new entrants, service operability).

Contribution .14 was provided for information. It was reported that MSCIDs are being assigned to non-switch elements and there may be an exhaust of these identifiers.

- ICCF - No report.
- IFAST - IFAST is meeting following the CTIA show in New Orleans.
- ITU - Rapporteur's meeting was held in San Diego on Dec. 1-8, 1998. Some of the work is being reorganized. Q.FIF is on target for completion Nov. 1999. The Security related contribution was accepted by Q.8 and will be the starting point for this work. All of the TR-45.2 contributions were accepted or accepted in part.
- TR45 - Contribution .03 provided the report. The Subcommittees were requested to report in March on the CTIA SRD on Circuit Switched Data (for transporting TTY over a digital air interface). This issue was remanded to Working Group II.

All the Subcommittees were asked to review their standards for Y2K impacts and to report this information to TR-45 by January, 1999.

The Subcommittee was asked to continue their investigation of the Emergency Alert System Message and to report their findings directly to CTIA.

TR-45 directed the Subcommittees to place the work on expanded ESN on hold.

Each Subcommittee was requested to forward their EDC process to the secretary of TR-45. Lee Valerius, TR-45.2 EDC, will take care of this item.

- TR45 AHAG - No report.
- TR45 ISD - No report.
- TR45 NAG - No report.

- TR45 ESN - Contribution .06 provided the ESN Administrator's report. Contribution .07 recommended global assignment of ESNs and SIDs and was provided for information.
- TR45.1 - No report.
- TR45.3 - No report.
- TR45.4 - TR-45.4 has baseline text for the Stage 1 Fixed Wireless Access Description and will be providing it to the Subcommittees for review and comments.
- TR45.5 - No report.
- TR-45.6 - No report.
- TR-45.7 - No report
- TR46 - No report.

9. Ad-Hoc Group Reports

- a. *Emergency Services Phase II* - PN-3890 and PN-4288 have been approved as baseline text. The Ad-Hoc Group is reviewing the proposal for a Global Emergency Services Number and has requested that this issue be discussed with TTC at the Joint Meeting on January 8, 1999.
- b. *Number Portability* - PN-4186 has been approved for publication as IS-756 Rev. A
- c. *Enhanced Surveillance Services* - Contribution .11 was presented. It was noted some modifications have been made related to timing issues and inband digits. It was agreed to accept the Stage 1 and 2 modifications as baseline.

The Workplan has not changed. The next meeting of the Ad-Hoc was scheduled in San Diego (but at the interim plenary it was decided to cancel the face-to-face meeting and instead convene a conference call).

It was agreed that a Project Request should be initiated to address the work on the next revision (A) of J-STD-025. The scope of this project is to address the final FCC Report and Order, when available.
- d. *IMT2000* - The next meeting of the Ad-Hoc is scheduled for January 5 and 6, in parallel with the TR-45.2 meeting. The purpose of the meeting is to review contributions planned for the March, 1999, ITU Study Group 11 meeting.

The Plenary recessed at 12:30 P.M. and reconvened at 2:00 P.M.

10. Old Business

- a. *IS-41 Field Trial Update/Feedback* - Nothing new to report.
- b. *1998 Workplan* - Contribution .02 provided the updated 1998-1999 Subcommittee Workplan. The Workplan will be reviewed at the closing plenary.

Contribution .10 was remanded to Working Group II for review as part of the PN-4081 Ballot resolution.

Contribution .15 was provided for information.
- c. *Management of ANSI 664 and ANSI 41* - This issue will be discussed during Working Group III.
- d. *PN-4173 Ballot Responses* - Contribution .08 provided the ballot responses for PN-4173 (OTAPA). Twenty-five responses were received: 17 approve without comments, 8 approved with comments, there were no opposing votes, and 2 responded with no

1 comments. Contribution .09 provided QUALCOMM's comments to PN-4173. Contributions
2 .08 and .09 were remanded to Working Group II for review and resolution.

- 3
4 e. *3G Work-* Contribution .12 provided the current status of the 3G capabilities matrix.
5 Contribution .13 provided information in regard to the Stage 1 service descriptions needed
6 to support the 3G work. Contributions .12 and .13 were remanded to the 3G Focus Group
7 for review.

- 8
9 f. *TR-45.2 Electronic Document Handling* - Nothing new to report at this time.

10 11 **11. New Business**

12
13 No discussion.

14 15 **12. Recess**

16
17 The Opening Plenary recessed at 2:30 P.M. on December 14, 1998. An Interim Plenary was
18 convened on December 15, 1998 at 11:45 A.M. to address Electronic Surveillance issues.

19
20 The following contributions were submitted and numbered as follows:

- 21
22 • TR45.2/98.12.15.01, ESS Ad-Hoc Group Report, from P. Musgrove, Ad-Hoc Group
23 Chair.
24
25 • TR45.2/98.12.15.02, Draft PN Request for next revision of J-STD-025, provided by
26 T. Richter.
27
28 • TR45.2/98.12.15.03, PINS Request for work on transition of J-STD-025-A to an
29 ANSI Standard, provided by T. Richter.
30
31 • TR45.2/98.12.15.04, PN Request for ANSI version of J-STD-025-A, provided by T.
32 Richter.
33
34 • TR45.2/98.12.15.05, Revised PN-4173 Ballot Response from Ericsson, from G.
35 Pavon.
36

37 Contribution TR45.2/98.12.15.01 provided the Ad-Hoc ESS Group Report. Two issues were
38 identified:

- 39
40 1. Recommendation to baseline modifications to Stage 1 and 2 descriptions. This was
41 agreed to per the Ad-Hoc Group Report (Item 9c above).
42 2. Recommendation to request PN/PINs for work on next revision of J-STD-025.

43
44 Contributions TR45.2/98.12.15.02, .03, and .04 addressed the second item above. These
45 contributions were approved with modifications. The revised PN/PINs request will be available at
46 the Closing Plenary for information.

47
48 It was also recommended that an Ad-Hoc Group (LAES) be created to address this new work on
49 a revision of J-STD-025. This recommendation was approved by the Plenary. Peter Musgrove,
50 AT&T Wireless Services, was asked to convene the first meeting of this group, when appropriate.

51
52 Contribution TR45.2/98.12.15.05 was remanded to Working Group II.

53
54 The Interim Plenary recessed at 12:30 P.M.

55 56 **13. Reconvene**

57
58 The Closing Plenary reconvened on December 18, 1998 at 8:00 A.M.

59
60 The following contributions were received and numbered as follows:

- 61
62 • TR45.2/98.12.18.01, Meeting Schedule and Agenda for January meeting, provided by the
63 Chair.
64
65 • TR45.2/98.12.18.02, PN Request for next revision J-STD-025-A, provided by T. Richter.

- TR45.2/98.12.18.03, PN Request for ANSI Version of J-STD-025-A, provided by T. Richter.
- TR45.2/98.12.18.04, PINS Request for ANSI Version of J-STD-025-A, provided by T. Richter.
- TR45.2/98.12.18.05, Correspondence from T1S1 regarding Revision of ANSI T1.628 - Emergency Calling Service, from W. Zeuch, Chair T1S1.
- TR45.2/98.12.18.06, Correspondence from T1S1 regarding Recently Assigned Translation Type 14 for Wireless Services Impacted by Number Portability, from W. Zeuch, Chair T1S1.
- TR45.2/98.12.18.07, Correspondence from T1S1 regarding a proposed USA contribution to ITU-T SG 13, from W. Zeuch, Chair T1S1.
- TR45.2/98.12.18.08, Correspondence from TTC6-6-2 regarding necessity to process stage 1, from S. Endo.
- TR45.2/98.12.18.09, Correspondence to Wayne Zeuch regarding PN-3890 and PN-4288, provided by J. Crollick.
- TR45.2/98.12.18.10, Correspondence to A. Chatterjee regarding PN-3890 and PN-4288, provided by J. Crollick.
- TR45.2/98.12.18.11, Correspondence to NENA Wireless Subcommittee regarding PN-3890 and PN-4288, provided by J. Crollick.
- TR45.2/98.12.18.12, IMT2000 Ad-Hoc Group Meeting Report, from R. Ryan, Chair Ad-Hoc Group.
- TR45.2/98.12.18.13, PN-4276: Wireline Replacement FWA Stage 1, provided by S. Jones, Chair TR45.4.
- TR45.2/98.12.18.14, Correspondence to TR45.3 and TR45.5 regarding BTTC Broadcast Categories, provided by S. Chander.
- TR45.2/98.12.18.15, Errata for IS-751 Modifications to Support IMSI, from D. Willett, EDS.

14. Old Business

Contributions TR45.2/98.12.18.02, .03, and .04 were provided for information and will be forward through the TR-45 process for approval.

Correspondence contained in contributions TR45.2/98.12.18.09, .10, and .11 was reviewed and approved as modified.

- a. *1998 Work Plan* - Opening Plenary contribution TR45.2/98.12.14.02 was reviewed. Several modifications were made to the workplan. The revised workplan was approved by the Plenary (Refer to attachment).
- b. *3G Work* - Contribution TR45.2/98.12.18.12 was presented. This contribution was for information purposes.

15. New Business

Contribution TR45.2/98.12.18.05 was introduced and remanded to the Ad-Hoc Emergency Services Group for review and comments.

Contribution TR45.2/98.12.18.06 was introduced and remanded to the Ad-Hoc Number Portability Group and to Working Group VI for review and comments.

Contribution TR45.2/98.12.18.07 was introduced and remanded to Working Group II for review and comments. It was noted that this contribution may be of interest to TR45.4 and may be relevant to the joint meeting with TTC on January 8, 1999 since it is applicable to vocoder bypass.

Contribution TR45.2/98.12.18.08 was introduced and discussed. Three types of services - user, network, and service drivers - were discussed in terms of which type of service requires a Stage 1 description. It was noted that it would be helpful to develop a description of the Stage 1 process. It was also mentioned that it is not always necessary to have a Stage 1 description, that it is permissible to describe a service via a white paper. This contribution was remanded to Working Group I for further review and discussion and also to Working Group II with respect to WIN aspects.

Contribution TR45.2/98.12.18.13 was presented by S. Jones, Chair TR45.4. Steve requested the subcommittee to review the Stage 1 description and to provide comments to TR45.4 by the end of February. It was also noted that a short presentation of this Stage 1 description will be provided at the January meeting. This contribution was remanded to Working Group I for review and comments.

16. Working Group Reports

WG I – A workplan has been developed to address Analog Group 3 Fax. There were no other changes to the workplan. The Working Group is reviewing the Y2K issue.

WG II – With the exception of one issue, the ballot review of PN-4081 has completed. The outstanding issue will be resolved at the January meeting.

PN-4173 is still under review. Ballot comments for Compaq, EDS, Ericsson, GTE, and Motorola have been reviewed. Part of Lucent Technologies ballot comments remain to be reviewed and all of the comments for Nortel and Qualcomm still need to be reviewed. The ballot review will continue in January.

The ballot review of PN-3661 (WIN) has completed. Based on the review and the resolution of the comments, the one vote of no from GTE has been changed to approve. All other comments have been resolved to the satisfaction of the respective companies. It was recommended that PN-3661 be approved for publication as IS-771, pending editorial review. This recommendation was approved by the Plenary. The Chair extended the Subcommittee's thank you to the WIN Task Group for outstanding effort.

The workplan for PN-4104 was revised per the attached workplan. No other changes were made to the workplan.

The Working Group is still reviewing the Y2K issue and the SRD from CTIA on Circuit Switched Data to support transport of TTY.

Contribution TR45.2/98.12.18.14 was reviewed and approved with modifications.

WG III – The request from Compaq to change the name of the SystemMyType Code assignment for Tandem to "Compaq" was agreed to by the Working Group. Compaq will be informed of this change as requested.

WG IV – There were no items requiring plenary action.

WG V - Vacant.

WG VI – The issue of network node Identifier has been resolved and the node ID will be based on an E.212 number. The workplan for PN-4197 will be delayed by one month.

PN-4117 (TSB-29-C) is in V&V and is scheduled for ballot in January.

Contribution TR45.2/98.12.18.15 provided a proposal for an Errata to IS-751. This contribution is for review and a determination on this issue will be made in January.

WG VII – The Working Group did not convene at this meeting.

17. Schedule of Meetings

1
2 Contribution TR45.2/98.12.18.01 was approved as modified.
3

4 **18. Assignments**
5

6 Assignments are noted in the report.
7

8 **19. Open Discussion**
9

10 There was no open discussion.
11

12 **20. Adjournment**
13

14 Having concluded the meeting's deliberations, a motion was made to adjourn. The meeting was
15 conducted in accordance with the TIA Legal Guide and TIA Engineering Manual and was
16 adjourned at 9:35 A. M on December 18, 1998.
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25 Cheryl J. Blum
26 Chair, TIA TR-45.2
27

CERTIFICATE OF SERVICE

I, L. Benjamin Ederington, an attorney in the law firm of Steptoe & Johnson, L.L.P., hereby certify that I have on this January 27, 1999 caused to be served by first class mail, postage prepaid, or by hand delivery, a copy of the foregoing Reply Comments to the following:

The Honorable William E. Kennard
Federal Communications Commission
1919 M Street, N.W. - Room 814
Washington, D.C. 20554

The Honorable Harold Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W. - Room 802
Washington, D.C. 20554

The Honorable Susan Ness
Federal Communications Commission
1919 M Street, N.W. - Room 832
Washington, D.C. 20554

The Honorable Michael Powell
Federal Communications Commission
1919 M Street, N.W. - Room 844
Washington, D.C. 20554

The Honorable Gloria Tristani
Federal Communications Commission
1919 M Street, N.W. - Room 826
Washington, D.C. 20554

Christopher J. Wright
General Counsel
Federal Communications Commission
1919 M Street, N.W. - Room 614
Washington, D.C. 20554

Linda Morrison
Office of the General Counsel
Federal Communications Commission
1919 M Street, N.W. - Room 614
Washington, D.C. 20554

David Sugrue, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W. - Room 5002
Washington, D.C. 20554

David Wye
Telecommunications Policy Analyst
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W. - Room 5002
Washington, D.C. 20554

A. Richard Metzger, Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W. - Room 500B
Washington, D.C. 20554

David Ward
Network Services Division
Common Carrier Bureau
2000 M Street, N.W. - Room 210N
Washington, D.C. 20554

Lawrence Petak
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W. - Room 230
Washington, D.C. 20554

Charles Isman (5 copies)
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W. - Room 230
Washington, D.C. 20554

Rod Small
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W. - Room 230
Washington, D.C. 20554

Julius Knapp
Office of Engineering and Technology
Federal Communications Commission
2000 M Street, N.W. - Room 230
Washington, D.C. 20554

The Honorable Janet Reno
Attorney General
Department of Justice
Constitution Ave. & 10th Street, N.W.
Washington, D.C. 20530

The Honorable Steve Colgate
Assistant Attorney General
Department of Justice
Constitution Ave. & 10th Street, N.W.
Washington, D.C. 20530

Douglas N. Letter
Appellate Litigation Counsel
Civil Division
Department of Justice
601 D Street, N.W., Room 9106
Washington, D.C. 20530

The Honorable Louis J. Freeh
Director
Federal Bureau of Investigation
935 Pennsylvania Ave., N.W.
Washington, D.C. 20535

Larry R. Parkinson
General Counsel
Federal Bureau of Investigation
935 Pennsylvania Ave., N.W.
Washington, D.C. 20535

H. Michael Warren, Section Chief
CALEA Implementation Section
Federal Bureau of Investigation
14800 Conference Center Drive, Suite 300
Chantilly, Va. 22021

James X. Dempsey
Daniel J. Weitzner
Center for Democracy and Technology
1634 Eye Street, N.W. Suite 1100
Washington, D.C. 20006

Thomas Wheeler
Michael Altschul
Randall S. Coleman
Cellular Telecommunications Industry Assoc.
1250 Connecticut Ave., N.W., Suite 200
Washington, D.C. 20036

Jay Kitchen
Mary McDermott
Todd Lantor
Personal Communications Industry Assoc.
500 Montgomery Street, Suite 700
Alexandria, Va. 22314

Roy Neel
Linda Kent
Keith Townsend
Lawrence Sarjeant
United States Telephone Association
1401 H Street, N.W., Suite 600
Washington, D.C. 20005

Douglas I. Brandon
Mark C. Rosenblum
Ava B. Kleinman
Seth S. Gross
AT&T Wireless Services
Fourth Floor
1150 Connecticut Avenue
Washington, D.C. 20036

Jill Lyon
Vice President for Regulatory Relations
American Mobile Telecommunications Ass'n
1150 18th Street, N.W.
Suite 250
Washington, D.C. 20036

David L. Sobel, Esq.
General Counsel
Electronic Privacy Information Center
666 Pennsylvania Avenue, S.E.
Suite 301
Washington, D.C. 20003

Steven Shapiro, Esq.
Legal Director
American Civil Liberties Union
125 Broad Street
New York, New York 10004

Barry Steinhardt, Esq.
President
Electronic Frontier Foundation
1550 Bryant Street
Suite 725
San Francisco, CA 94103

Robert M. Lynch
Roger K. Toppins
Hope E. Thurrott
SBC Communications, Inc.
One Bell Plaza, Room 3023
Dallas, TX 75202

John F. Raposa
Richard McKenna
GTE Service Corporation
600 Hidden Ridge, HQE03J36
P.O. Box 152092
Irving, TX 75015-2092

William T. Lake
John H. Harwood II
Samir Jain
Todd Zubler
Wilmer, Cutler & Pickering
2445 M Street, N.W.
Washington, D.C. 20037-1420

Stephen G. Kraskin
Sylvia Lesse
Joshua Seidemann
Kraskin, Lesse & Cosson, LLP
2120 L Street, N.W., Suite 520
Washington, D.C. 20037

Barbara J. Kern
Ameritech Corporation
4H74
2000 Ameritech Center Drive
Hoffman Estates, IL 60196

Michael W. Mowery
Pamela J. Riley
David A. Gross
AirTouch Communications, Inc.
1818 N Street, N.W.
Suite 320 South
Washington, D.C. 20036

J. Lloyd Nault, II
BellSouth Telecommunications, Inc.
4300 BellSouth Center
675 West Peachtree Street, N.E.
Atlanta, GA 30375

Joel M. Margolis
Nextel Communications, Inc.
1505 Farm Credit Drive
McLean, VA 22102

Albert Gidari
Perkins Coie LLP
1201 Third Avenue
40th Floor
Seattle, Washington 98101

Lon C. Levin
Vice President and
Regulatory Counsel
American Mobile Satellite Corp.
10802 Park Ridge Blvd.
Reston, VA 20191

John M. Goodman
1300 I Street, N.W.
Washington, D.C. 20005

Francis D.R. Coleman
Director of Regulatory Affairs
North America
ICO Global Communications
1101 Connecticut Ave., N.W.
Suite 550
Washington, D.C. 20036

Henry M. Rivera
Larry S. Solomon
J. Thomas Nolan
Shoot, Hardy & Bacon L.L.P.
1850 K Street, N.W.
Suite 900
Washington, D.C. 20006

Carole C. Harris
Christine M. Gill
Anne L. Fruehauf
McDermott, Will & Emery
600 Thirteenth Street, N.W.
Washington, D.C. 20005

Peter M. Connolly
Koteen & Naftalin, L.L.P.
1150 Connecticut Avenue, N.W.
Washington, D.C. 20036


L. Benjamin Ederington